Vault Operation

Fig. 1

Selected Tenderers (FURTHER USERS)

Vault Secure Operations Centre

Certificate Issuance Centre 10

Secure Tender Boxes 30 20

(USER) 5
Awarding Authority

AA Request Electronic Certificate

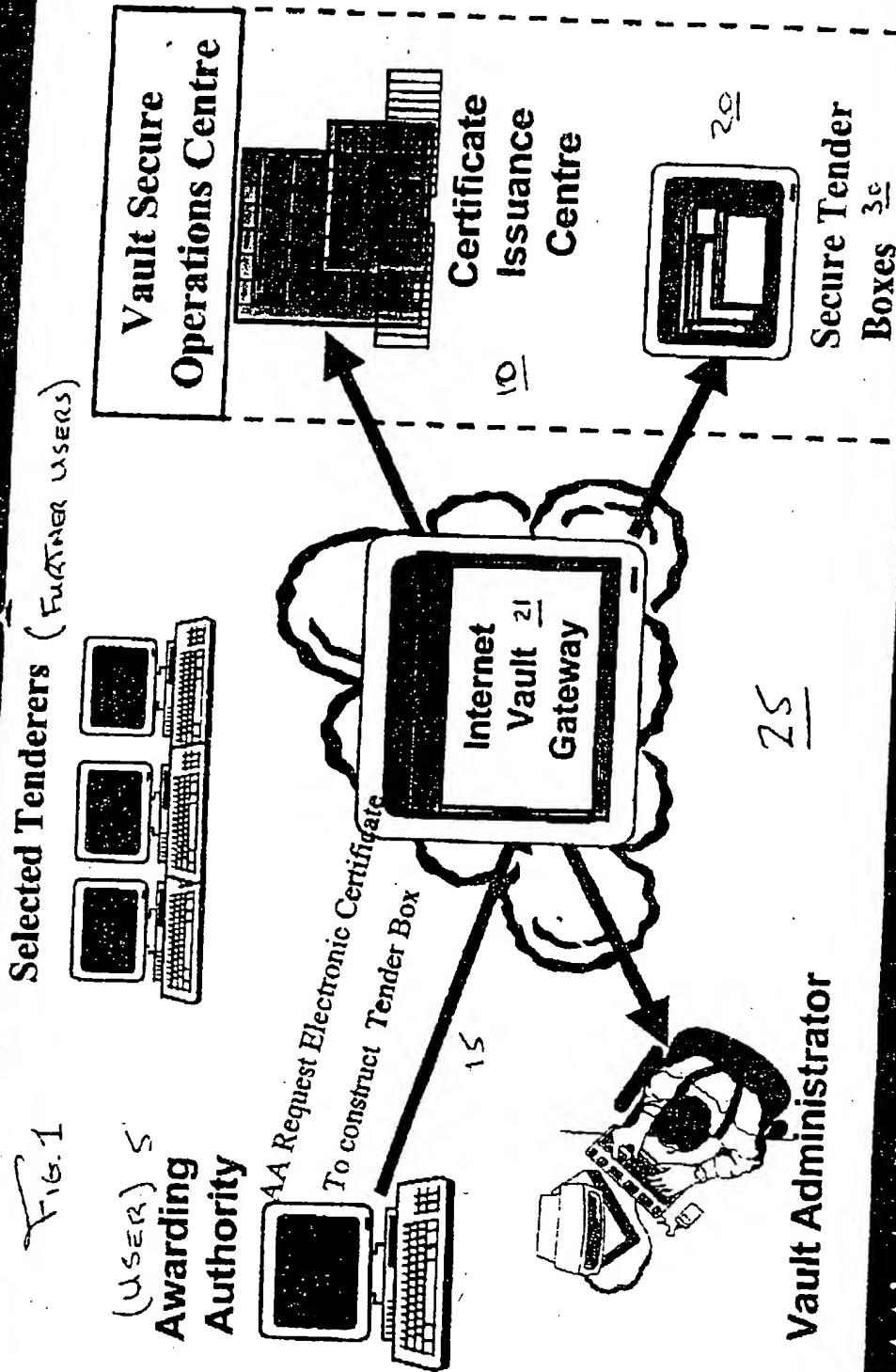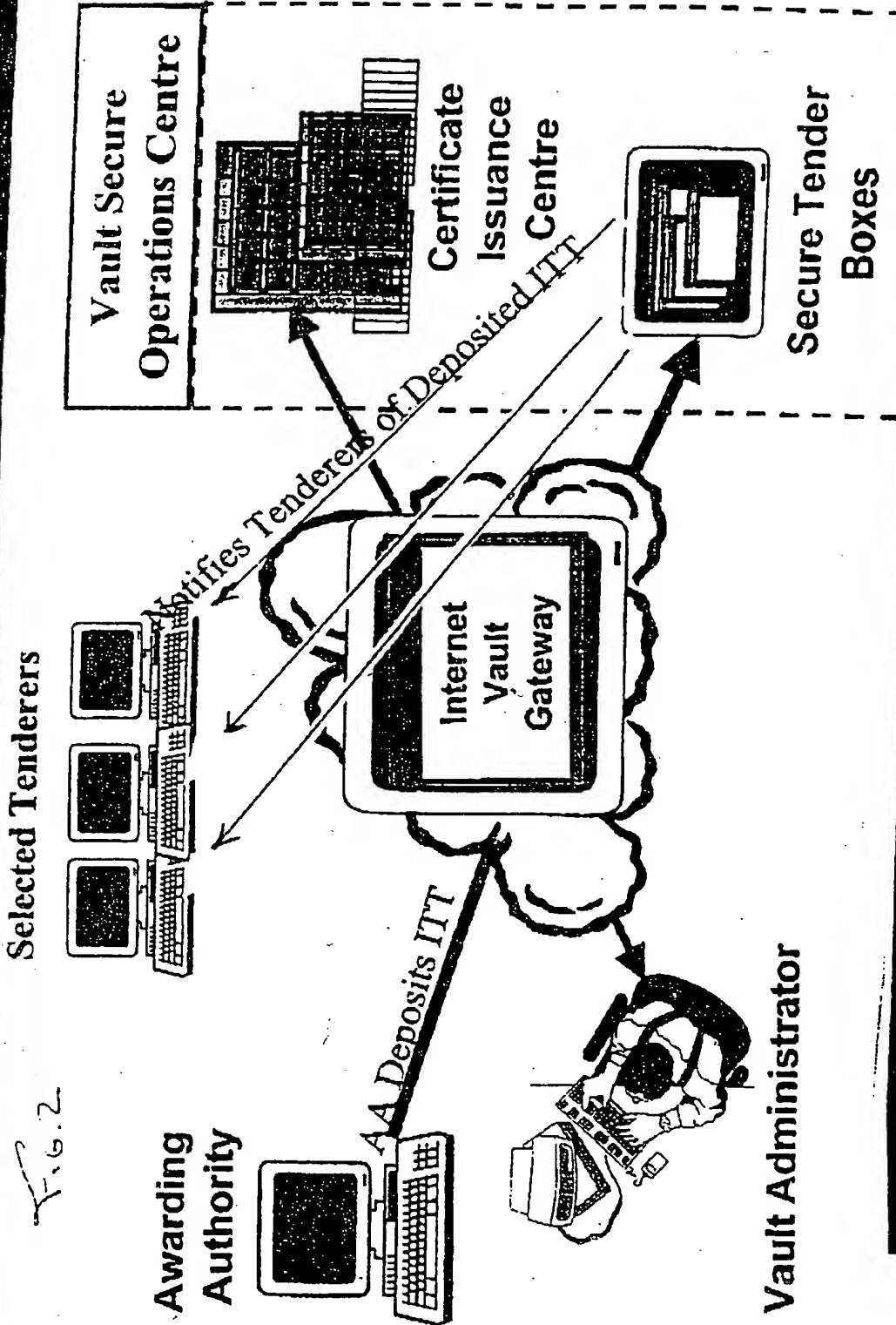To construct Tender Box

Internet Vault Gateway 21

15

25

Vault Administrator
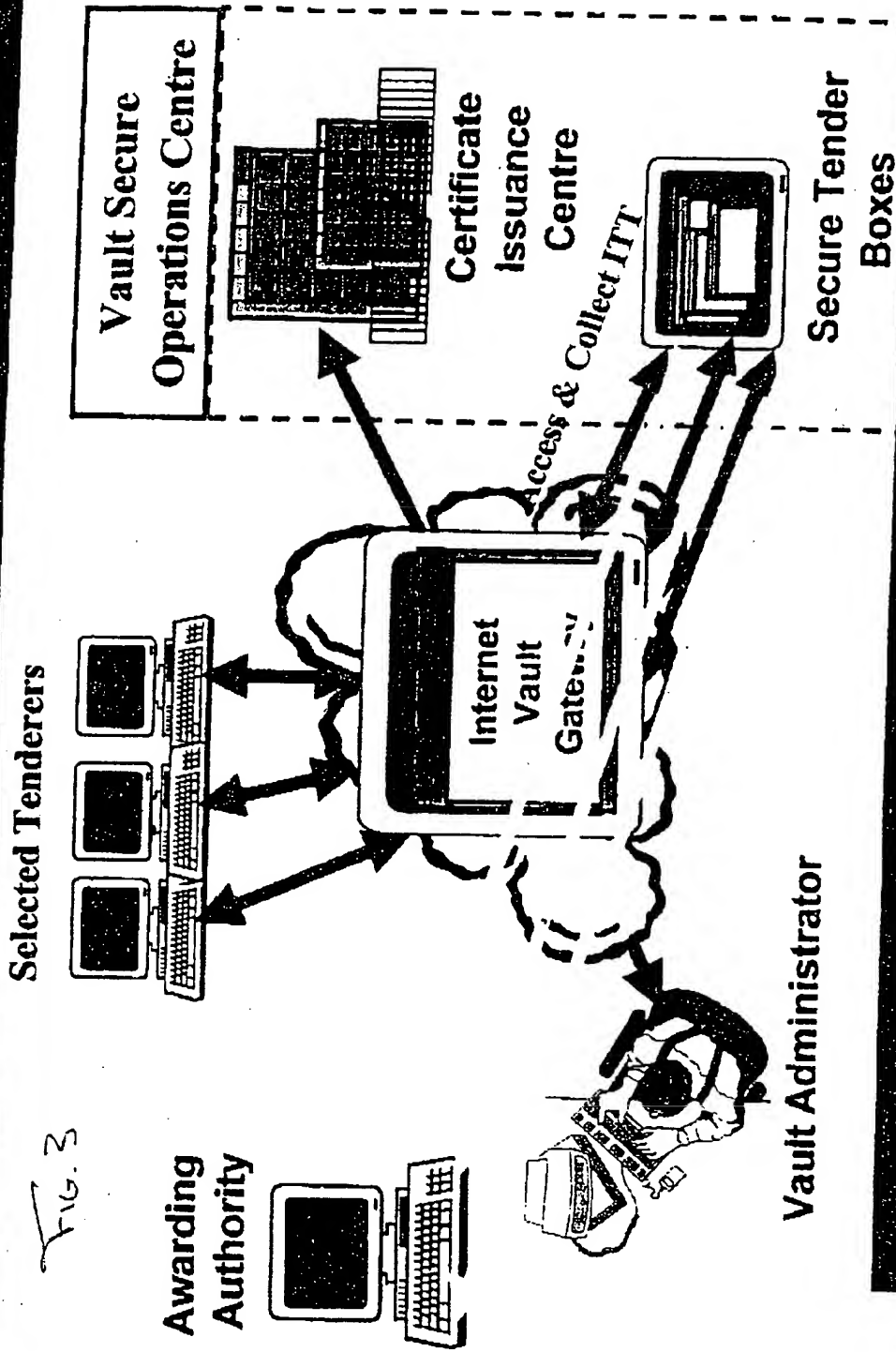
AA's Application for a Tender Box is validated by the Electronic Signature Certificate issued

Vault Operation

Fig. 2

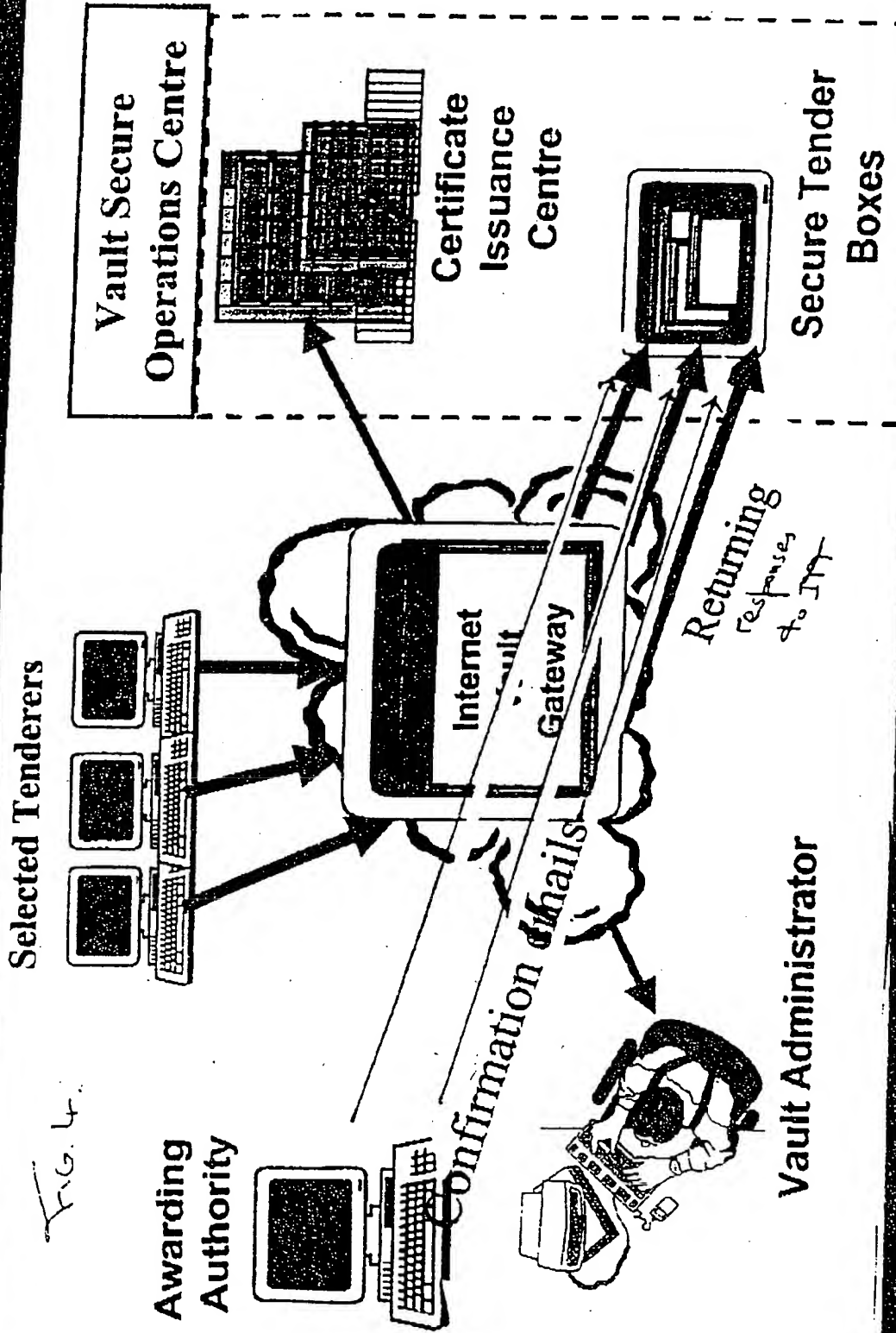**Selected Tenderers**

Awarding Authority

Vault Administrator

AA Deposits ITT

Notifies Tenderers of Deposited ITT

Internet Vault Gateway

Vault Secure Operations Centre

Certificate Issuance Centre

Secure Tender Boxes

Tender Box Sends SSL Email to Tenderers once ITT Deposited

Vault Operation

Fig. 3

Selected Tenderers

Awarding Authority

Internet Vault Gateway

Vault Administrator

Vault Secure Operations Centre

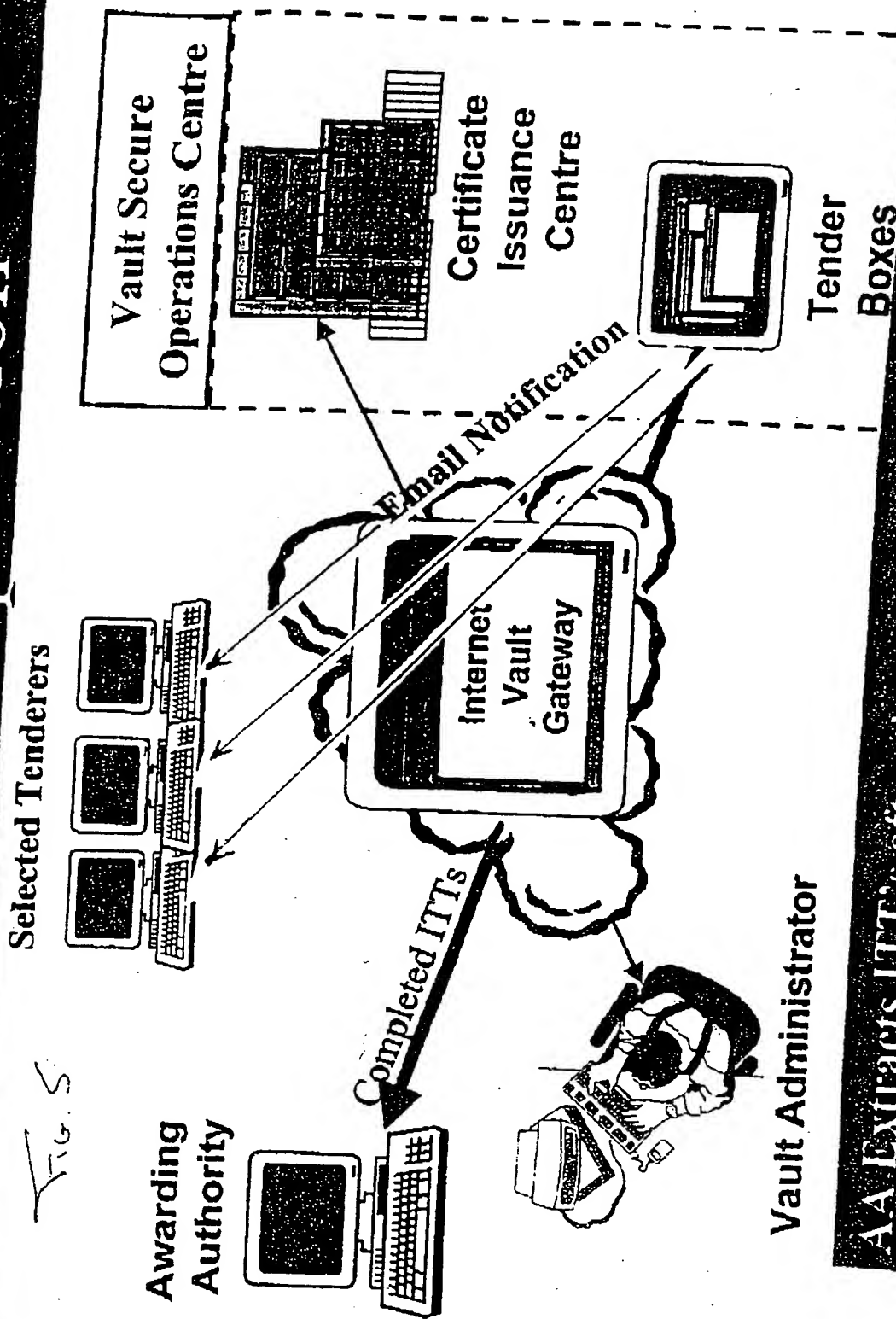**Certificate Issuance Centre**

Access & Collect ITT

Secure Tender Boxes

Tenderers Purchase E-Certificate. Access & Receive ITT using Certificate. Email confirmation sent to AA.
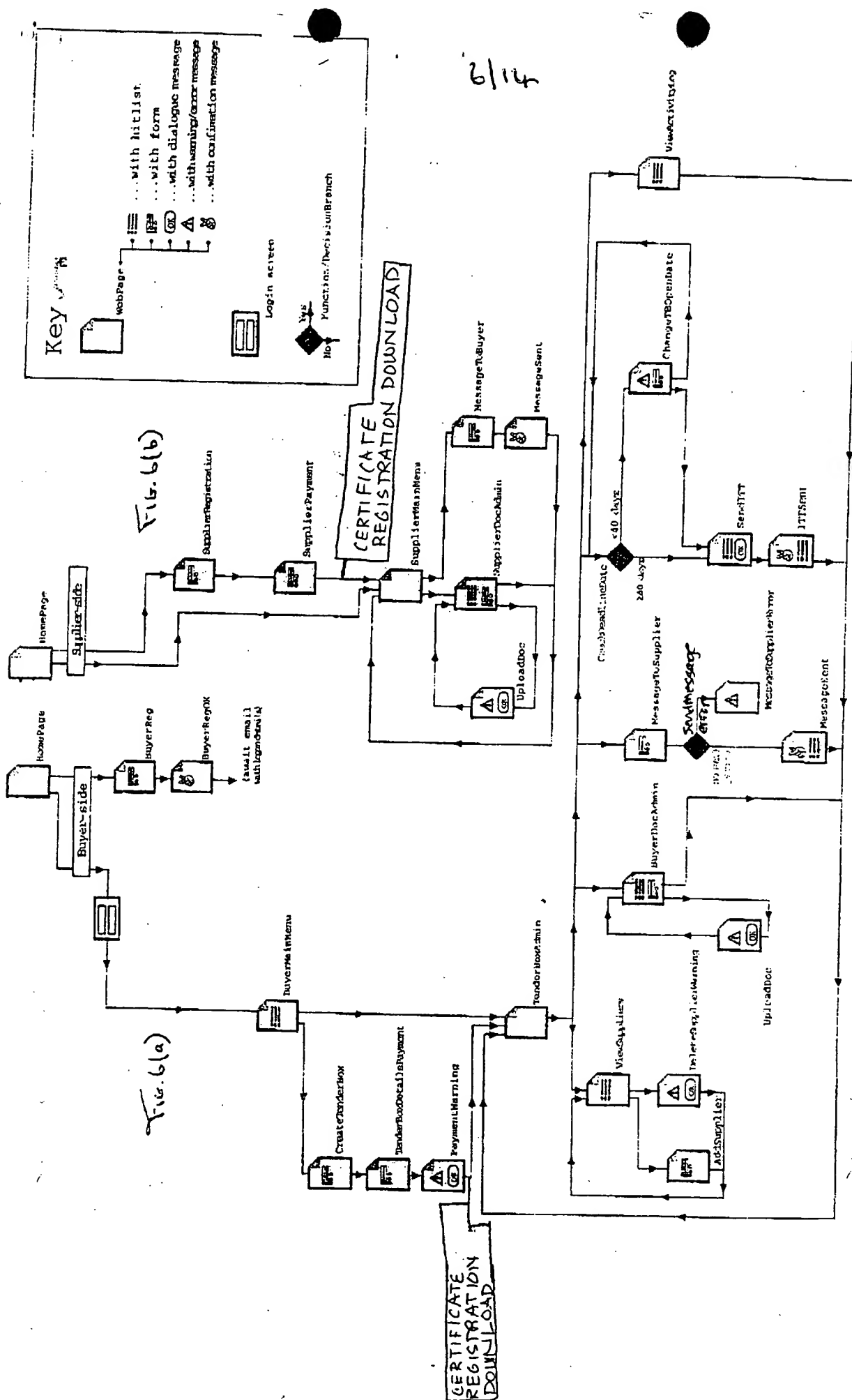
Vault Operation

Selected Tenderers

Awarding Authority

Internet Vault Gateway

Confirmation emails

Returning response to ITT

Vault Administrator

Vault Secure Operations Centre

Certificate Issuance Centre

Secure Tender Boxes

Tenderers Return Completed ITT & Confirmation emails

Fig. 4.

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Vault Operation

Fig. 5

Selected Tenderers

Vault Secure Operations Centre

Certificate Issuance Centre

Tender Boxes

Internet Vault Gateway

Email Notification

Completed ITTs

Awarding Authority

Vault Administrator

AA Extracts ITT's after the Appointed Time. Email confirming sent to tenderers

Key

WebPage

- ... with hitlist
- ... with form
- ... with dialogue message
- ... with warning/error message
- ... with confirmation message

Login screen

Yes / No Function::/DecisionBranch

Fig. 6(b)

Supplier-side

HomePage

SupplierRegistration

SupplierPayment

CERTIFICATE REGISTRATION DOWNLOAD

SupplierMainMenu

SupplierDocAdmin

UploadDoc

MessageToBuyer

MessageSent

MessageToSupplier

SendMessage

MessageToSupplierError

MessageContent

CheckDeadlineDate

<40 days

>40 days

SendItt

ITTSent

ViewActivities

ChangeTBOpenDate

Fig. 6(a)

Buyer-side

HomePage

BuyerReg

BuyerRegOK

(await email with login details)

BuyerMainMenu

CreateTenderBox

TenderBoxDetail&Payment

PaymentWarning

TenderBoxAdmin

BuyerDocAdmin

UploadDoc

ViewSupplier

DeleteSupplierWarning

AddSupplier

CERTIFICATE REGISTRATION DOWNLOAD

CERTIFICATE REGISTRATION DOWNLOAD

Buyer Registration

Fill out ALL the fields on this form, then click the "submit" button in order to apply for a Vault account. After correctly filling and submitting the form, an email will be sent to the address entered into the Contact Email field. This email will contain a URL, username and password. Click on the URL, and enter the username and password when prompted access your new Vault buyer account.

Important: although use of digital certificate technology is a crucial part of the Vault service, you will NOT be asked to install a digital certificate on your Web browser until you create your first tenderbox after logging into the Vault service.

Registration Form

Please complete all of these fields to identify yourself to the Vault.

Organisation Name:

Address:

Postcode:

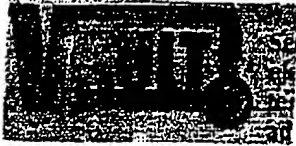Telephone:

Fax:

Organisation Email:

Web Address:

Position:

First Name:

Last Name:

Contact Email:

Contact Telephone:

$FIG. 7$

Create a New Tenderbox

Before entering the details of your new tenderbox, please enter your Contact Telephone Number and your Contact Email to enable the Vault to create a new tenderbox for you.

Security Validation

Telephone:

Email:

Enter your Tenderbox Information

FIG. 8

Title of Tender Notice:

Tender reference:

ITT (Invitation To Tender) Date (DD/MM/YYYY):

ITT (Invitation To Tender) Time (HH:MM:SS):

Tender Opening Date (DD/MM/YYYY):

Tender Opening Time (HH:MM:SS):

[Submit] [Reset]

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Complete Enrolment Form

FIG. 9

Test page 001-2001-03-09

Information for the Digital Certificate
Fill in all fields. Use only the English alphabet with no accented characters. The information marked with a " + " is included in your Dignal Certificate and is available to the public.

First Name: *   (required)
Nickname or middle initial allowed
(example: John B.)

Last Name: *   (required)
(example: Smith)

E-mail Address: *   (required)
(example: jsmith@trustwise.com)

Vault PIN Number: +
(example: 12346)

Tender Reference: +

Challenge Phrase
This unique phrase protects you against unauthorised action on your Digital Certificate and should not be shared with anyone. Do not lose it! It is required to revoke and renew your Digital Certificate.

Enter Challenge Phrase: (required)
Do not use any punctuation

Optional: Choose Your Encryption Strength
The encryption strength indicated below is the maximum allowed by your browser software. We recommend that you leave this as it is.

Optional: Enter Comments
In some cases, your Administrator will instruct you to enter Shared Secret (information known only to you and the Administration information in this field. The Administrator uses this shared secret to verify that it really is you submitting the application. This comment will not be included in your Digital Certificate.

Digital Certificate Customer Contract
By applying for, submitting, or using a Digital Certificate you are agreeing to the terms of the BT TrustWise Customer Contract below:

RFP
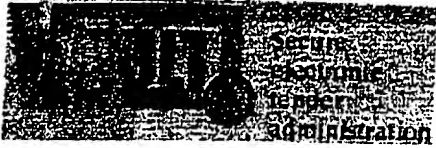
Organisation Name: ADD SUPPLIER

FIG. 10

Address:

Postcode:

Telephone:

Fax:

Organisation Email:

Web Address:

Position:

First Name:

Last Name:

Contact Email:

Contact Telephone:

[Submit] [Reset]

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FIG. 11

Tenderbox Title: UNIX Servers

Step 1 Step 2 Step 3

SeanCo: Joe Bloggs

Filename (click to download)	Size (KB)	Uploaded
BIP3.DOC	25600	
PrOJECtGuidepp2.doc	190976	
Vault_programme.doc	24576	
drawbacks.rtf	13209	
e-Pilots_TRN_001.doc	888320	

ScottCo: Scott Smith

Filename (click to download)	Size (KB)
Invention_Disclosure_Form.doc	25088
SE-Response_to_%C9estions_1.0.doc	335872
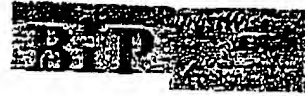
Tenderbox Title: Network Consultancy Services

FIG. 12

Supplier Management

Organisation	Name	Email		
			Add new supplier	
SeanCo	John Smith	dseang@mac.com	Edit	Delete
ScottCo	Scott Smith	scott@bipcontract.scom	Edit	Delete
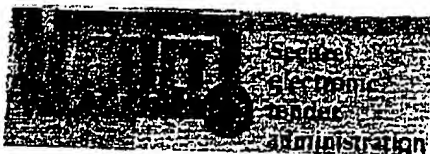
Tenderbox Title: Network Consultancy Services

FIG. 13

Step 1	Step 2	Step 3	4	

Activity Log

Buyer:	Supplier:	Vault:	
Event			Time - date

Supplier details edited for SeanCo

Email report sent to Buyer ten days before deadline

SeanCo emailed buyer: Subject Message from SeanCo

SeanCo uploaded file Response_02.rtf

SeanCo uploaded file Response.txt

SeanCo downloaded ITT doc invitation_doc.rtf

SeanCo downloaded ITT doc Invitation1.txt

Supplier SeanCo successfully enrolled

ITT notification emailed to 1 suppliers : SeanCo,

Buyer uploaded file invitation_doc.rtf

Buyer uploaded file Invitation1.txt

Supplier ScottCo created
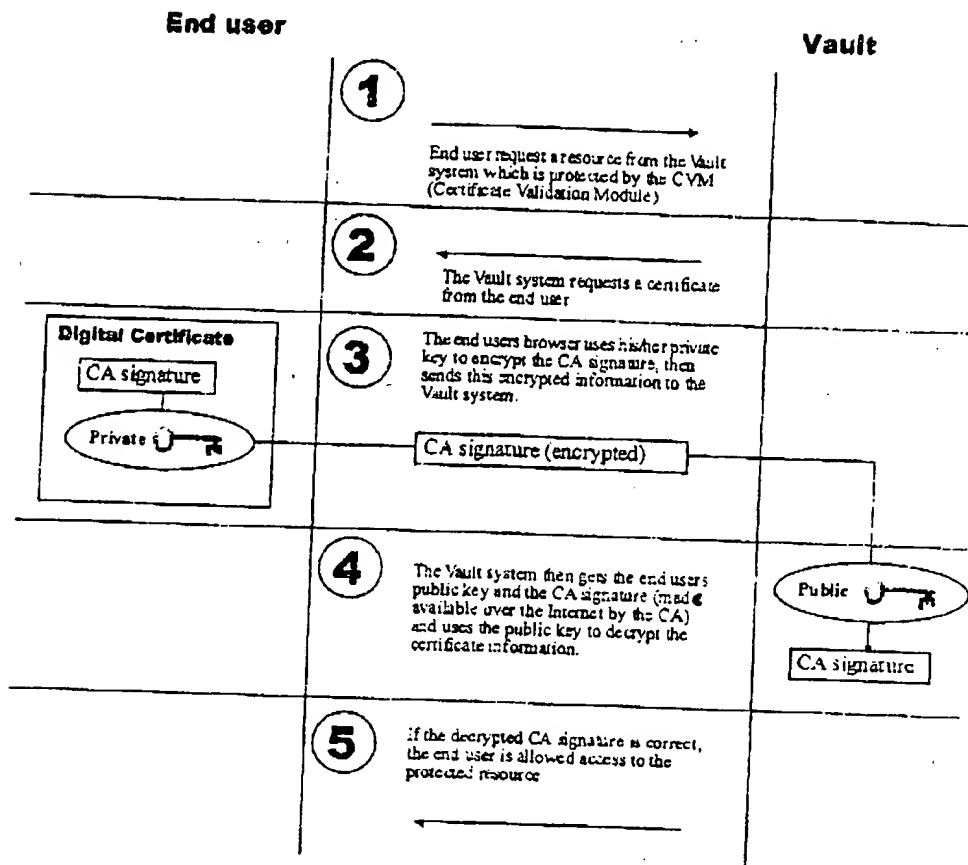
Supplier SeanCo created

Buyer created tenderbox

End user

Vault

(1)

End user request a resource from the Vault system which is protected by the CVM (Certificate Validation Module)

(2)

The Vault system requests a certificate from the end user

Digital Certificate

CA signature

Private

(3)

The end users browser uses his/her private key to encrypt the CA signature, then sends this encrypted information to the Vault system.

CA signature (encrypted)

(4)

The Vault system then gets the end users public key and the CA signature (made available over the Internet by the CA) and uses the public key to decrypt the certificate information.

Public

CA signature

(5)

If the decrypted CA signature is correct, the end user is allowed access to the protected resource

FIG. 14